

# *Can Defined Contribution and Defined Benefit Plans Offer Actuarial Fairness? Absolutely!*

**by Gary S. Mettler**

► During this era of increasing defined contribution plan coverage, actuarially fair annuities can protect base income needs, shifting risk back to where it belongs—to financial institutions and the insurance industry. This article reviews the environment in which actuarially fair annuities can play this important role and discusses options, considerations and common objections pertaining to actuarially fair annuity products. ◀

**T**here is tremendous emphasis placed on investment issues now that the retirement race is on, and employer defined contribution plans and personal savings form the cornerstone of wealth for many individuals fortunate enough to have such coverage and assets. Seemingly limitless amounts of energy and time have been devoted by a variety of economists, money managers and financial planners to analyzing asset allocation models, market timing strategies, investment style contrast, etc. Those efforts have produced an astonishing number of articles, studies and books every year, feeding consumers' insatiable appetites for this information. Defined benefit plan coverage, which protected the "floor" retirement benefit by providing an insurance mechanism for many older retirees, is diminishing for current retiree groups. For many current retirees, income insurance issues and income replacement concepts are as foreign as investment issues and concepts are hot. In this era of vanishing defined benefit plan coverage, a few savvy companies are beginning to revive an income replacement focus and related products. Actuarially fair products now available are forming the basis of this revival.

## **DEFINED CONTRIBUTION VERSUS DEFINED BENEFIT**

Where have all the flowers (defined benefit plans) gone? According to federal government data, the number of defined benefit retirement plans dropped from 170,000 in 1985 to 53,000 in 1997. In addition, the number of defined contribution plans increased from 207,748 in 1985 to 647,000 in 1997 (Hale 2000). Not only has the number of defined benefit plans declined, but also the percentage of private sector workers with defined benefit plan coverage has declined (Ippolito 2001). The reasons for this decline range from imposition of tax law changes and legislative and regulatory burdens.<sup>1</sup>

Unfortunately, the decline of defined benefit plan coverage will leave many retired employees without a traditional income replacement vehicle. The strength of the defined benefit plan in pay status is its antidissipation mechanism. Since the defined benefit plan has no cash value plan benefits, like similar Social Security benefits, it cannot be dissipated in an untimely fash-

ion. The defined benefit plan's primary design function is to pay benefits. The defined contribution plan's primary design function is to defer income.

The three-legged stool analogy is often used to describe a well-balanced financial position necessary to support retirement. One stool leg represents Social Security benefits, another leg represents defined benefit plan coverage and the third leg represents personal savings, including defined contribution plan assets. Using this analogy, liquid, nonliquid, stable value and capital growth assets can be proportioned to provide retirees with balanced and effective income sources at retirement, which are sorely needed—retirees no longer have the luxury of time to recover from asset-draining circumstances. When the defined benefit plan, the floor retirement benefit, is missing from this picture, the risk of a substandard financial retirement due to asset-draining circumstances is tremendous.

These circumstances or financial shocks, working individually or together, can devastate individuals ages 50 to 85, who have little or no time left to make up losses. Financial shocks follow acrimonious divorce, long-term physical or mental health declines, large casualty losses, career interruptions, business failures, sudden family disability or death, litigation costs, poor gifting decisions, asset conversions, capital market losses, etc. In addition, household consumption studies as early as 1988 indicate that individuals aged 65 and older without access to actuarially fair annuity markets exhibit markedly declining consumption levels as they age, versus a relatively level consumption pattern for individuals with access to actuarially fair annuity markets (Friedman and Warshawsky 1988). Engen, Gale and Uccello (1999) state, "Owing to increases in mortality risk, optimal consumption generally declines as households reach and transit through retirement. As a result, their optimal wealth decumulation involves the eventual exhaustion of nonannuitized assets well before the longest possible lifespan." Defined benefit plans provide long-term financial benefits free of dissipation risk to long-term financial vitality, which plagues retirees when their capital formations may begin to shrink much more rapidly than anticipated. In fact, poverty levels

among the elderly population in this country can be linked directly to a lack of defined benefit plan coverage.

### **FIDUCIARY RESPONSIBILITY**

There are heavy burdens being imposed on employers/plan sponsors regarding the extent to which employees should be educated about retirement financing issues. The proliferation of defined contribution plans and their need to achieve good investment performance in light of possible inconsistent funding places employees at risk of inadequate capital formations at retirement. Many employees with only defined contribution plan coverage lack the necessary education, skill and talent to successfully manage their defined contribution plan assets.

Recent studies indicate that employees fail to roll over lump-sum distributions (LSD) into qualified accounts (Burman, Cole and Gale 1999). Responsible employers, recognizing employee retirement and investment education deficits, institute policies to educate employees on retirement financing. Under Department of Labor (DOL) Interpretive Bulletin 96-1, which was developed with input from the Securities and Exchange Commission (SEC), employers will not be considered investment advisors under the Investment Advisers Act of 1940 by offering investment advice if certain "safe harbors" are utilized.<sup>2</sup> The federal appeals court decision in *Bixler v. Central Pennsylvania Teamsters Health and Welfare Fund* holds that the "duty to inform is a constant thread in the relationship between beneficiary and trustee; it entails not only a negative duty not to misinform, but also an affirmative duty to inform when the trustee knows silence might be harmful."

In light of declining defined benefit plan coverage, the employer's fiduciary burden, and safe harbors offered by the DOL, how might an employer respond to the need to educate its workforce about income replacement issues, dissipation risks and concepts like the "three-legged stool"?

### **INCOME REPLACEMENT ALTERNATIVES TO DEFINED BENEFIT PLANS**

Many employer-sponsored defined contribution plans offer employees a little-emphasized opportunity to purchase an immediate annuity

policy using some or all of their defined contribution plan cash balance when employees retire or otherwise leave service. In light of missing defined benefit plan coverage and employer retirement financing educational burdens, renewed emphasis might be directed toward an annuity purchase opportunity via the employee's defined contribution plan. New insurance indus-

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try immediate annuity policies providing actuarially fair pricing are beginning to emerge. These policies can replace missing defined benefit plan coverage. An immediate annuity is a policy where the “annuitization rate,” or benefit payment rate, is set immediately at the purchase date, with the actual benefit payment beginning at some future date. The initial benefit payment date can occur within one year or after several years from the annuity purchase date, just like a deferred vested defined benefit plan's initial payment.<sup>3</sup> Like a defined benefit plan, an immediate annuity has no cash value. However, the immediate annuity has an “economic” value reflected in the scheduled benefit payments and a high nonforfeiture value because the immediate annuity is irrevocable, and benefits cannot be commuted. In this case, an immediate annuity policy can be seen as a defined benefit pension plan equivalent.

#### **DETERMINING THE BENEFIT**

An actuarially fair immediate annuity policy is one where the annuitant's “rated age” is sub-

stituted for his or her chronological age for policy pricing purposes. This technique is often referred to as “substandard” or “impaired risk” underwriting. A skilled annuity underwriter at a life insurance company makes a determination as to the annuitant's mitigated probabilities of survival due to the annuitant's actual health circumstances. This has the effect of increasing annuity benefits for any given premium or reducing premium costs for any given annuity benefit. For example, a 65-year-old male, utilizing a premium cost of \$150,000 and electing a lifetime benefit option with an installment refund provision will receive a normal/standard monthly benefit beginning in 30 days of \$1,060 per month or \$12,720 per year. However, an insurance company that offers impaired risk underwriting reviews his medical condition and issues him an age rating of 72. This increases his benefit payment to \$1,214 per month or \$14,568 per year—a 14.53% benefit increase. Conversely, if he requires a \$1,060 monthly benefit, his standard premium cost of \$150,000 is reduced to \$130,972, which results in a 12.69% premium savings.<sup>4</sup> An impaired risk premium cost reflects the consumer pricing advantage of using an actuarially fair annuity. This annuitant now has the advantage of using his true mortality circumstances to increase annual spendable income or reduce premium costs.

#### **EXAMPLE OF RATE-UP ESTIMATES**

An annuitant needs to have an illness or injury that significantly mitigates his or her probability of survival to qualify for impaired risk annuity underwriting, which only affects life contingent annuity benefits. For example, an annuitant suffering from diabetes type 1 might obtain a five-year age rate up, or an individual suffering from hepatitis C might obtain a ten-year age rate up. An industrial accident causing the loss of limbs or a trucking accident resulting in paraplegia may provide an individual with a 15-year rate up. Therefore, if you are chronologically aged 50 and you suffer from the above individual conditions, you might be treated as a normal person aged 55, 60 or 65 respectively for annuity policy pricing purposes. Individuals with health histories of stroke, heart attack or cancer may also be considered annuity-impaired risks.<sup>5</sup>

## **MEDICAL INFORMATION**

Medical information helps annuity underwriters determine the overall physiological condition of the annuitant. In most cases, insurance companies will not send examiners or gather medical specimens from the annuitant, which is the practice in life insurance underwriting. However, to determine the eligibility of impaired risk annuity benefits, medical documents may be required by the annuity underwriter. These documents include physicians' reports at the time of illness diagnosis, hospital discharge summaries, recent medical examinations conducted by a physician, and records of previous medical problems recorded by a physician and/or a hospital. Within 48 hours, underwriting is usually accomplished and an annuity pricing decision is reached.

## **HISTORY OF THE IMPAIRED RISK ANNUITY MARKET**

Impaired risk annuity underwriting is not new, but until 1995, it was only available in the structured settlement or litigation annuity market. Presently, there are about a dozen life insurance carriers in the nonlitigation annuity market offering this technique, up from two in 1995. Because the National Association of Insurance Commissioners (NAIC) approved actuarial guideline IX-C in March 2001, this number is poised to expand. Actuarial guideline IX-C states in part: "The population is aging and the need for fairly-priced single premium immediate annuity benefits is substantially increasing. Forcing companies to hold standard reserves results in many people being overcharged (for extra cost of capital associated with higher reserve) at a time in their life when they may have the greatest need" (NAIC 2001). Previous to the passage of this guideline, insurance carriers had to reserve on a standard basis for substandard annuity risks. Consequently, this technique had limited appeal. Now insurance carriers may reserve based on the true mortality risk, making this technique more profitable. Actuarial guideline IX-C will encourage more carriers to enter the impaired risk annuity market, creating better products and consumer pricing (Mettler 2001). Currently, impaired risk annuity underwriting is

only available in the fixed annuity market. This technique has yet to be extended to the commercial variable annuity marketplace.

## **ANNUITY PURCHASES ADMINISTRATION**

Employers seeking to make actuarially fair annuity policies available to retirees can do so by arrangements with insurance carriers or plan administrators. Employer educational literature broadly highlighting the benefits of the three-legged stool analogy and the availability of actuarially fair annuity pricing can be jointly developed with carriers and plan administrators. At the time of retirement or employment termination, the employee submits medical information to the insurance carrier for an underwriting determination. If an attractive offer is received, some or all of the funds accrued in the employee's defined contribution plan may be utilized to fund the annuity policy. The employee can now create an attractive defined benefit plan in pay status substitute. The annuity policy may be held by the plan or distributed to the employee as an individual retirement account (IRA, direct rollover). If the policy is held by the plan, the annuity carrier may have to use a unisex annuity table. Unisex tables combining male and female mortality factors generate greater benefits than a female gender-only table. However, as an IRA, a male gender-specific table may be used to produce greater annuity benefits than a unisex table, due to the exclusion of female mortality factors. Should the employee not need current income, a deferred immediate annuity policy may be purchased to provide a benefit at some later date. For example, an employee changing jobs at the age of 50 purchases an annuity benefit beginning at the age of 60 or 65, payable for life. At policy purchase, an internal earnings accrual rate is fixed for the term by the annuity carrier, and the resulting benefit reflects compound interest and the passing of time. In addition, the annuitization rate is established at the time of annuity purchase, and the fixed annuity benefit is predetermined, i.e., guaranteed in advance. A substandard rating (if any), established at the time of annuity purchase, is also factored into the ultimate annuity benefit payment. Even if a substandard rating is not obtained, the employee may effectively establish a

defined benefit plan substitute by funding a deferred immediate annuity with a long deferral period. The annuity benefits are secure as the immediate annuity has high nonforfeiture value since the policy is irrevocable, and annuity benefits cannot be commuted.

For example, a terminated female employee, aged 55, utilizes a portion of her 401(k) funds to purchase a \$50,000 immediate annuity on a life and installment refund basis with monthly benefits beginning at her age of 65. A standard annuity risk produces a monthly benefit of \$650. However, should this employee receive a rated age of 65 at the time of annuity purchase, her monthly benefit will increase to \$860—a 32.31% increase due to her impaired health.<sup>6</sup> Should her other 401(k) funds become dissipated prior to the age of 65, she can rest assured that her deferred immediate annuity will stay the course.

### **REVERSIONARY ANNUITY**

Historically, defined benefit plans provided survivorship annuities for spousal protection. As defined benefit plan coverage diminishes so does this benefit—or does it? New reversionary annuities, which may be purchased in defined contribution plans, duplicate the same coverage. Reversionary annuities provide lifetime income benefits to policy beneficiaries at the death of the insured. The income benefit payable to the beneficiary is contracted for at the time of policy issue.

Reversionary annuities require relatively less premium than life insurance, as both the insured and beneficiary are medically underwritten. The beneficiary becomes part of the annuity contract, and the dual mortality discount is passed to the policy owner in the form of premium cost savings. An unhealthy beneficiary may further reduce premium costs. The premium (“pure” cost of insurance) is paid as a single lump sum or over a period of time. While a reversionary annuity has no cash value like immediate annuities and traditional defined benefit plans, the policy is “paid up” after a single premium payment or completion of a series of premium payments.<sup>7</sup>

An example is the following. A male, aged 45, wants to arrange, via his defined contribution plan, a \$2,000 monthly benefit payable to his wife, aged 35, over her life beginning immedi-

ately upon his death. She suffers from diabetes type 1 and related illnesses that keep her from working full time. While he has other assets, savings and life insurance, he wishes to establish “dead hand” control by prearranging a lifetime pension benefit in favor of his spouse ensuring her receipt of an asset that produces a long-term economic benefit upon his death. At guaranteed interest rates, the lump-sum premium cost is \$25,189; alternatively, this cost may be paid in ten annual installments of \$3,107.<sup>8</sup>

These policies require individual medical underwriting and may not be suitable for plans with more than 1,000 participants. Unfortunately, no group product is available at this time. In addition, since a reversionary annuity produces a death benefit like life insurance, the defined contribution plan will need to conform to the incidental death benefit rules.<sup>9</sup> New IRS rules used in determining the value of life insurance protection mandate use of table 2001 after tax year 2000 for qualified plans. However, this annuity could be purchased outside of the defined contribution plan as a stand-alone benefit. In this case, the incidental death benefit rules and the life insurance protection value calculation for qualified plans would not apply. Proceeds of the reversionary annuity are treated as the proceeds of a lump-sum life insurance policy converted to a monthly settlement option.<sup>10</sup> The calculated lump-sum life insurance portion is excluded from ordinary income tax, and any interest earned is included as ordinary income subject to income tax as received from the annuity contract by the policy beneficiary over his or her life. Income regarding amounts held by an insurer with respect to a beneficiary shall be prorated over the period the payments are made.<sup>11</sup> The amount paid to the beneficiary is then discounted to present value on the basis of the interest rate used by the insurance company to calculate the payment and the mortality tables prescribed by the IRS. The amount determined under this proration, after it has been discounted to present value, is excluded from the gross income of the policy beneficiary.

For example, a female beneficiary, aged 75, begins a claim. The claim is for \$1,000 per month at a 4.5% discount rate. Her life expectancy is 12.5 years, or 150 months.<sup>12</sup> The gross payout is \$150,000 ( $\$1,000 \times 150$ ). When discounted, the

\$1,000 claim produces a present value of \$117,584.<sup>13</sup> The difference of \$32,416 (\$150,000 – \$117,584), prorated over 150 months, is included in gross income and subject to ordinary income tax rates. The \$1,000 monthly benefit produces a taxable portion of \$216.11 (\$32,416/150), or \$2,593.32 per year. The balance of this monthly benefit, or \$783.89, is nontaxable income. Should this female survive to 151 months and beyond, the entire \$1,000 monthly benefit is taxable.

If the beneficiary predeceases the insured, the policy does not pay benefits. To protect the insured against this possibility, a small additional premium cost may be incurred by the insured to provide for payment of the paid premium or scheduled premium if higher, to the insured, over a period of ten years or life, whichever concludes first. The beneficiary must be insurable as a reversed insured to qualify for this feature.

A reversionary annuity held inside or outside a qualified defined contribution plan makes a good substitute for a traditional survivorship annuity arrangement usually available through a defined benefit plan. And unlike a traditional survivorship annuity in a defined benefit plan, which produces 100% taxable income to the surviving spouse/insured, the reversionary annuity's tax benefits are superior, producing nontaxable income benefits. In addition, if you consider the relatively low premium costs due to utilizing dual mortality underwriting, an attractive, actuarially fair annuity is available for spousal/insured income replacement needs.

### **WHAT ABOUT DEFINED BENEFIT PLANS?**

Defined benefit plans act like annuities when they are deferred vested or enter pay status. But, can these plans be actuarially fair? The answer is yes!

Defined benefit plans pay retirement benefits determined by formulas based on years of service, salary and age. Many non-ERISA pension plans experience pension strain due to funding disability pensions for police officers, firefighters, and other safety officers and personnel who are injured on the job. A disability pension might call for a full pension with an annual 3% COLA payable to an injured, male firefighter at the age of 26 due to a debilitating

injury. At half-salary of \$24,000 per year, this might require a pension reserve of \$658,076. However, an impaired risk annuity that matches the pension liability with a corresponding annuity benefit may be issued to the pension fund. With the pension liability decreased, the pension is immunized against the disability pension risk. The insurance company completing a medical review of the pensioner/insured issues an annuity policy with a rated age of 46 due to the firefighter's disabilities. The premium cost for this annuity is \$508,688. The difference of \$149,388 (\$658,076 – \$508,688) between the pension reserve and the annuity premium cost becomes an excess reserve in the pension plan. Everything else being equal, this excess reserve may be used to increase the disability pensioner's annual benefit to \$31,048—a 29.37% increase—or held in the plan, reducing future employer contributions, or a combination of both.

If a pension plan had 1,000 disability pensioners producing a pool of 150 qualified impaired risk insureds with an average pension reserve cost of \$500,000 per pensioner, the pension reserve is \$75 million (\$500,000 × 150). If medical underwriting produces a cost savings of 20% for this pool, and there is sufficient pension plan liquidity to fund a \$60 million (\$75 million × (1 – .20)) annuity premium with annuity benefits exactly matching plan liabilities, the pension realizes excess reserves of \$15 million (\$75 million pension reserve – \$60 million annuity premium), everything else being equal.

A detailed plan census needs to be completed regarding this potential risk pool. This detailed census will enable the plan administrator and annuity carrier to accurately match pension liabilities with annuity benefits. In addition, pensioner authorization to release medical information may need to be secured. A retirement plan fiduciary mitigating insurance carrier risk might require a syndicate of several insurance carriers to take down portions of the impaired risk pool. Utilizing the above example, three carriers might each take 50 impaired risks of the 150 qualified insureds. However, since no two insurers view risk the same way, the plan fiduciary will be subject to annuity policy pricing variations. In addition, the plan administrator may wish to immunize only a portion of the risk due to cash or investment restrictions. So, an ac-

curate census is critical. This technique may be extended to union plans, other ERISA pensions and all other defined benefit arrangements. These pension systems will need to survey retirement plan participants in pay status and deferred vested pensioners to determine which plan participants are eligible.

In an era of low interest rates and inconsistent capital appreciation, pensioners participating in both defined benefit and defined contribution plans will need to look at methods of enhancing their retirement benefits. Impaired risk immediate annuities can provide the saving grace that may determine a retiree's quality of life. Disabled and ill members of our society desperately need immediate annuities because they can least afford financial loss.

### **OBJECTIONS**

There are several common objections to immediate annuities. However, since these vehicles are insurance mechanisms and not investment products, many of the standard objections often voiced are not convincing.

#### ***“The Insurance Company Keeps the Money When I Die”***

The claim that the insurance company keeps the money when annuitants die is false; in fact, there is no money to keep. The premium used to fund the annuity policy was “spent on” as opposed to “invested in” the annuity contract at the time of annuity purchase. The insurance contract has no cash value immediately after purchase, just like other types of insurance contracts such as policies for auto liability, term life, fire, etc. However, even though there is no cash value, like a defined benefit plan pension and Social Security, the contract owner receives the economic benefits of annuity ownership via receipt of the scheduled benefit payments. With life contingent annuity benefits, you enjoy the benefits of the group by receiving the average annuity rate associated with all individuals purchasing life contingent annuity coverage.

#### ***“There’s No Liquidity”***

Eliminating liquidity is the main reason for purchasing the policy in the first place, and where the antidissipation benefit comes into play. The immediate annuity is permanent

insurance that cannot be controverted, i.e., annuity policies are irrevocable and noncommutable. In fact, this is the insurance mechanism of the annuity and the feature that enables the policy owner to realize long-term economic benefits from long-term accumulated capital.

#### ***“What About the Spouse and/or Children?”***

Let's remember who we are trying to protect. Your primary concern is retirement plan retirees; you work for their interests, not their children's or spouses' interests. That being said, many retirees want to provide a survivor benefit for their spouse or children. This may be arranged through annuity survivorship benefits, cash or installment refund provisions, or annuities with long guarantee periods. These provisions reduce single life benefits that are enhanced by impaired risk underwriting. When comparing single life annuity benefits and annuity benefits with estate provisions, retirees can understand the high opportunity costs incurred by not using assets for their own support and enjoyment. However, many retirees welcome these costs as survivorship benefits. Cash or installment refund provisions or annuities with long guarantee periods allow pensioners to maintain “dead hand” control over this income source. Dead hand control means that the pensioner makes a conscious decision today to ensure income to their beneficiary, income that cannot be commuted or controverted by any means long after the pensioner is deceased. Benefits protecting the beneficiary are in place should the beneficiary remarry then subsequently divorce, enter into a business and suffer failure, or experience a health decline dissipating other assets. The pensioner takes responsibility while still alive and effectively purchases an insurance policy for their beneficiary. This decision impacts the beneficiary long after the pensioner's demise (thus the term “dead hand” control).

#### ***“There’s No Inflation Protection”***

One option to protect against inflation is purchasing an annuity with a cost-of-living adjustment (COLA) feature. However, since the annuity is actuarially sound, a COLA would require the pensioner to initially accept lower relative benefits in exchange for increasing future

benefits. Employing the three-legged stool analogy, capital assets can be used to provide the inflation protection the non-COLA annuity lacks. Meanwhile, the annuity provides the insurance protection the capital assets lack. No one financial product does it all.

#### ***“What if the Insurance Company Defaults?”***

Diversification will help to mitigate the risk of the insurance company defaulting. An employer or plan administrator may choose to work with three to four high-quality carriers offering impaired risk annuity underwriting and allow employees to make several annuity purchases, spreading the income risk over the carrier group. But remember, the more carriers you employ, the more annuity pricing variation you are going to receive, as no two carriers view risk the same way.

#### ***“The Internal Rate of Return for Annuities Is Too Low”***

The internal rate of return for annuities may be low. However, you don't buy annuities to get rich. You buy annuities for a whole different reason: so you don't become poor. Again, utilizing the three-legged stool analogy, other assets with higher risk/return characteristics are called for. A recent 401(k) study indicated groups with defined benefit plan coverage and 401(k) plan coverage invest their 401(k) contributions more appropriately for their age and risk tolerance than individuals in groups with only 401(k) coverage (Uccello 2000). One can infer from this study that annuities may aid in the asset allocation process by providing a floor benefit that eases older retirees into accepting capital risk. Income models exploring the use of combining impaired risk annuities with mixed investment portfolios can be constructed (Mettler and Tollemache 1998).

#### ***Americans with Disabilities Act and Fiduciary Concerns***

The Americans with Disabilities Act (ADA) was enacted on July 26, 1990 and became effective for employee groups of 15 or more by July 26, 1994. ADA's purpose is to eliminate discrimination against individuals with disabilities. What are employer and retirement plan administrators' concerns in light of evolving impaired

risk annuity markets and ADA? It is just a matter of time until persons with substandard health begin to pressure their employers and retirement plan administrators into examining these products. Forcing substandard annuity risks to accept standard annuity tables may constitute disability-based discrimination that becomes less acceptable in light of evolving annuity markets. In addition, an ill or disabled retiree may argue, by excluding these annuity policies and techniques, the retirement plan is not meeting its fiduciary burden of protecting plan participants, particularly when the employer offers no defined benefit plan coverage and, therefore, no income replacement mechanism.

#### **CONCLUSION**

At a time of increasing defined contribution plan coverage and minuscule defined benefit plan coverage, income replacement concepts need to be emphasized more than ever, as increasing risk burdens of capital accumulation and investment outcomes continue to shift to retirees. Educating retirees regarding income replacement concepts and then protecting their base income needs by providing them an opportunity to purchase an actuarially fair annuity at retirement or service separation may begin a trend, shifting risk back to where it belongs—to financial institutions and the insurance industry. In light of future volatile capital markets and a low interest rate environment, many individuals may have no choice but to annuitize a portion of their liquid financial assets to provide increased spending power without the worry of reinvestment concerns. Because the entire annuity benefit is spendable and usually paid for

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life, there are no reinvestment worries driving future dividend or interest income concerns. The annuity offers tremendous financial freedom to individuals without, or with inadequate, defined benefit plan coverage. An actuarially fair annuity provides more income or reduces premium costs for sick and disabled retirees when they may still be marginally healthy enough to enjoy the benefits or utilize increased benefits to finance their care while simultaneously reducing a retiree's fear of remaining alive with no source of income should assets become quickly dissipated due to financial shocks and/or overconsumption. ◀

## Endnotes

1. There are many reasons for the decline of defined benefit plan coverage. Studies by noted economists have produced many papers regarding this decline. Analysis regarding defined benefit plan decline is beyond the scope of this article.

2. DOL Interpretive Bulletin 96-1 analysis is beyond the scope of this article.

3. The concept of annuitization can be difficult to grasp. Annuitization is the pricing of annuity benefit payments. Immediate annuitization means annuity pricing is set immediately, usually expressed as a rate per month or year, per thousand dollar purchase. The payment of the immediate annuity benefit may begin at any time. Usually the immediate annuity benefit payment begins within a year of the pricing date. However, immediate annuities may be priced to support an initial benefit payment date after a long deferral period. This deferral period may be as long as 30 years under current immediate annuity market availability. Unlike deferred annuities, traditional immediate annuities have no cash value and offer no separate accounts. It is tempting to mentally consider immediate annuities as "investments" because of the large dollar purchase prices usually involved. However, the term "investment" can label many types of financial transactions and only serves to confuse in the case of insurance products. Insurance products produce "risk shift" mechanisms. The cost of shifting income risk is the consumer's premium paid to the insurance company issuing the immediate annuity policy. The premium cost is "spent" money, not invested money—just like one spends money on other insurance policy premiums for other risk-shifting needs such as health, disability, auto liability, fire, etc., protections. Immediate annuity policies are permanent insurance policies with high nonforfeiture values, as the policies are irrevocable and noncommutable.

4. Annuity market pricing estimate at the time of writing.

5. While various illnesses and adverse medical conditions may cause individuals to experience higher morbidity rates, an experienced annuity underwriter makes final pricing determinations based upon the degree of impaired health and other financial considerations. These examples are merely based on the author's general experience.

Annuity cases presented for medical underwriting are considered by their individual merits on a case-by-case basis.

6. Annuity market pricing estimate at the time of writing.

7. Reversionary annuities offer guaranteed "paid up" policies. However, there are several versions of this product offered by a limited insurance carrier group, and the reversionary annuity product market is undergoing tremendous changes. Reversionary annuity policy terms and conditions vary.

8. Reversionary annuity pricing estimate at the time of writing.

9. Treasury Regulations state insurance benefits provided via a qualified retirement plan must be incidental to the primary purpose of the plan. The primary purpose of a retirement plan is to provide retirement benefits to plan participants and their beneficiaries. See IRS Code Section 1.4011(b)(1)(i). While there are several tests, depending on the type of qualified retirement plan, the basic rule is that insurance costs are considered incidental if they equal less than 25% of the cost of providing all plan benefits, both deferred and current.

10. IRS Private Letter Ruling (PLR) #9717033 dated, April 30, 1997.

11. IRS Code Section 101(d)(1) and (d)(2), 1.101-4(b) and (c).

12. IRS Table V.

13. 1983 Individual Annuity Mortality Table age nearest birthday.

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